

CLAIMS

What is claimed is:

1. A tape carrier package structure, which comprises:
 - (a) a semiconductor chip having:
 - 5 (a1) a plurality of I/O pads arranged along the sides thereof; and
 - (a2) a plurality of dummy pads arranged on the corners thereof;
 - (b) a tape carrier having a device hole and a plurality of side-situated lead-bonding areas and corner-situated lead-bonding areas surrounding the device hole;
 - (c) a set of inner leads, including:
 - 10 (c1) a group of I/O leads, which are bonded between the respective I/O pads on the semiconductor chip and the side-situated lead-bonding areas on the tape carrier; and
 - (c2) a group of dummy leads, which are bonded between the respective dummy pads on the semiconductor chip and the corner-situated lead-bonding areas on the tape carrier.
- 15 2. The tape carrier package structure of claim 1, wherein the tape carrier is a TAB tape.
3. The tape carrier package structure of claim 1, wherein the semiconductor chip is an LCD driver chip.
4. The tape carrier package structure of claim 1, wherein the I/O pads and the dummy pads on the semiconductor chip are made of aluminum.
- 20 5. The tape carrier package structure of claim 1, wherein the dummy leads are spaced at substantially the same pitch as the I/O leads.
6. An tape carrier package structure, which comprises:
 - (a) a semiconductor chip having:
 - (a1) a plurality of I/O pads arranged along the sides thereof; and
 - 25 (a2) a plurality of dummy pads arranged on the corners thereof;

(b) a tape carrier having a device hole and a plurality of side-situated lead-bonding areas and corner-situated lead-bonding areas surrounding the device hole;

(c) a set of leads, including:

(c1) a group of I/O leads, which are bonded between the respective I/O pads
5 on the semiconductor chip and the side-situated lead-bonding areas on the tape carrier; and

(c2) a group of dummy leads, which are bonded between the respective dummy pads on the semiconductor chip and the corner-situated lead-bonding areas on the tape carrier, and which are spaced at substantially the same pitch as the I/O leads.

7. The tape carrier package structure of claim 6, wherein the tape carrier is a TAB tape.

10 8. The tape carrier package structure of claim 6, wherein the semiconductor chip is an LCD driver chip.

9. The tape carrier package structure of claim 6, wherein the I/O pads and the dummy pads on the semiconductor chip are made of aluminum.

10. A tape carrier package structure, which comprises:

15 (a) a semiconductor chip having:

(a1) a plurality of I/O pads arranged along the sides thereof; and

(a2) a plurality of dummy pads arranged on the corners thereof;

(b) a TAB tape having a device hole and a plurality of side-situated lead-bonding areas and corner-situated lead-bonding areas surrounding the device hole;

20 (c) a set of leads, including:

(c1) a group of I/O leads, which are bonded between the respective I/O pads on the semiconductor chip and the side-situated lead-bonding areas on the TAB tape; and

(c2) a group of dummy leads, which are bonded between the respective dummy pads on the semiconductor chip and the corner-situated lead-bonding areas on the
25 TAB tape, and which are spaced at substantially the same pitch as the I/O leads.



11. The tape carrier package structure of claim 10, wherein the semiconductor chip is an LCD driver chip.

12. The tape carrier package structure of claim 10, wherein the I/O pads and the dummy pads on the semiconductor chip are made of aluminum.

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